

Alg. 2 Warm Up # 4-2

1. For $f(x) = \sqrt{x+4}$ and $g(x) = x^2 - 2$

find:

a) $g(f(x))$ b) $f(g(x))$ c) $f(g(3))$ d) $g(f(21))$

Check your homework answers:

1. -5

2. 3

3. -2

4. x

5. x

6. They are inverses.

8a. $3(x+6)(x+2)$

8b. $(2x+5)(2x-5)$

8c. $5x(2x-9)$

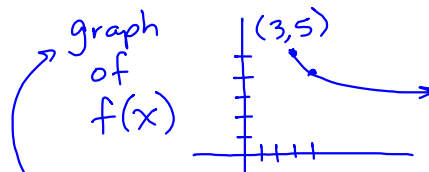
9. $x < -5$ or $x > -1$

10. $2 < x < \frac{10}{3}$

11. $-2 \leq x \leq 2$

12. $x \leq -2$ or $x \geq 8$

13. $-31 \leq x \leq 23$



15. $f(x)$: dom: $x \geq 3$
range: $y \leq 5$

Inverse: $y = (x-5)^2 + 3$
dom: $x \leq 5$, range: $y \geq 3$

$$15) \quad x = -\sqrt{y-3} + 5 \quad d: x \geq 3$$

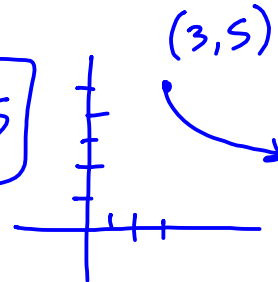
$$(x-5)^2 = (-\sqrt{y-3})^2 \quad y \leq 5$$

$$(x-5)^2 = y-3$$

$$y = (x-5)^2 + 3 : x \leq 5$$

$$d: x \leq 5$$

$$r: y \geq 3$$



Clear your desk for Test Ch. 5.
Scientific calculator ok.

Chapter 6 starts tomorrow.
Exchange your book for Vol. 2!

HW: White worksheet